



ADJ HAYMET PhD DSc
DIRECTOR
SCRIPPS INSTITUTION OF OCEANOGRAPHY

9500 GILMAN DRIVE
LA JOLLA, CALIFORNIA 92093-0210
TEL: (858) 534-2826
FAX: (858) 453-0167

December 1, 2007

The Honorable Arnold Schwarzenegger
Governor
State of California
State Capitol Building
Sacramento, CA 95814

The Honorable Ted Kulongoski
Governor
State of Oregon
160 State Capitol
900 Court Street
Salem, Oregon 97301-4047

The Honorable Christine Gregoire
Governor
State of Washington
PO Box 40002
Olympia, WA 98504-0002

Dear Governors Schwarzenegger, Kulongoski, and Gregoire:

I commend the West Coast Governors' approach to improving the health of the ocean and coastal resources of our three states through their Draft Action Plan. California's coastal economy rests on the physical and ecological health of its beaches, coastline, and coastal ocean ecosystem that attract industries, residents, and visitors alike. The California Current Ecosystem is undergoing significant change, and the management of these resources must be based on the best, most current scientific monitoring and modeling to enable their continued economic value and contribution to our quality of life. With this in mind, I have included specific comments on several Draft Action Plan Priority Areas below.

Priority Area 1: Ensure Clean Coastal Waters and Beaches. Although significant economic and social impacts result when beaches are closed due to poor water quality, the duration of beach closures is often longer than necessary because of time delays in water sampling and testing. Standard laboratory testing can require days to assess a health risk. Operational monitoring programs are indeed the first step, but beyond this, more effective and efficient *methods* of testing for contaminants will be crucial in reducing the impacts beach closures. We support the development of improved water quality testing methods using modern autonomous platforms and biological and chemical sensors. This effort, coupled with the application of science-based decision making tools, may allow beach closures to be shorter and less frequent.

Priority Area 3: Promote the Effective Implementation of Ecosystem-based Management. Healthy West Coast ecosystems provide products and services that humans require and enjoy, but the quality of these products and services can be severely impacted by pollution, habitat degradation, and human population growth. It is clear

that an ecosystem-based approach is needed to support complex and difficult management decisions. We support the development of an Integrated Ecosystem Assessment based on existing research and monitoring efforts in the California Current Ecosystem.

Priority Area 5: Increase Ocean Awareness and Literacy Among Citizens. An interested and engaged public will be needed for our states to successfully address complex coastal and ocean issues that effectively balance use with conservation. Numerous marine science education and awareness programs already exist on the West Coast, including three NSF-funded Centers for Ocean Sciences Education Excellence (COSEE): COSEE California, in which Scripps Institution of Oceanography is an active participant; COSEE West; and COSEE Learning Communities. We strongly support investment in educational programs and campaigns, especially those that focus on K-12 education. The Birch Aquarium at Scripps interacts with over 75,000 children each year through informal education programs. Backed by world-renowned marine science experts from SIO, the aquarium can present the best and most current ocean science and information to audiences. We encourage staff from the West Coast Governors to interact with the experts at the Birch Aquarium as they work to develop a plan for future ocean awareness and education.

Priority Area 6: Expand Ocean and Coastal Scientific Information, Research, and Monitoring. Information about the value of the coast and ocean to the State has been fragmented, and data to guide present and future management and land use is inadequate. Maintaining a healthy and economically vibrant coastline requires improved understanding of the linkages between physical, biological, and climatological coastal processes – but at present, significant data and information gaps hinder achievement of effective ecosystem-based management. Accurate statewide bathymetric and subseafloor mapping of California’s coastal and nearshore waters is one crucial component necessary to guide ocean management decisions. We look forward to working with Sea Grant to implement a comprehensive and sustained approach to ocean and coastal research and monitoring that will enable improved management of beaches, fisheries, and Marine Protected Areas.

Priority Area 7: Foster Sustainable Economic Development in Coastal Communities. The residents and tourists who use California’s beaches are the mainstay of the coastal economy. However, the health of these beaches is threatened not only by poor water quality, but by erosion as well. Priority Area 7 of the Draft Action Plan highlights the dangers that altered sediment transport present to coastal structures, and discusses the need for regional approaches to sediment management. It is important to recognize that the economic importance of beaches due to tourism is increasingly recognized at both the federal and the state levels as well. For example, beach tourism exceeds agriculture in the economies of several coastal states. Future beach sand budgets will be influenced by factors ranging from rainfall to regulation of opportunistic sand nourishments with dredged material, and our understanding of past sediment budgets is qualitative at best. However, the tools needed to adequately support a regional approach to sediment management are lacking. Monitoring and modeling of beach topography and sand volume over extended periods of time via scientific LIDAR is essential in understanding beach health and providing the knowledge needed to form effective public policy.

Thank you for the opportunity to comment on the Draft Action Plan, and please feel free to contact me directly with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Haymet". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Tony Haymet
Director